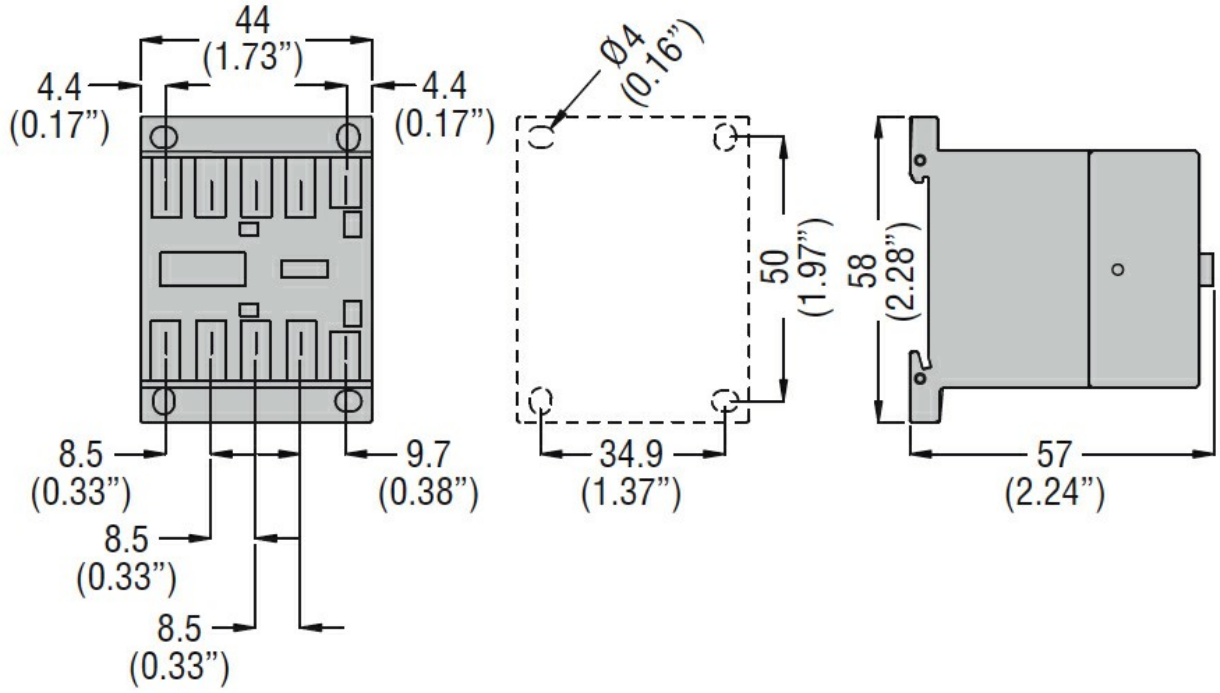
# 11BGF0031A110

CONTROL RELAY WITH AC COIL 50/60HZ, 110VAC, 3NO AND 1NC, FASTON TERMINALS

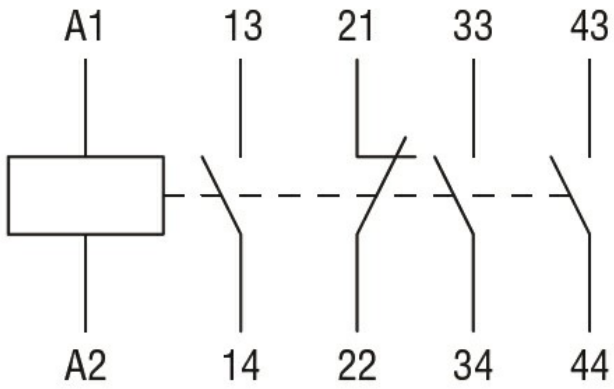
| | | | |
|---|---|---|---|
| Product designation | | | Auxiliary contactor |
| Product type designation | | | BGF00 |
| **Contact characteristics** | | | |
| Number of poles | | Nr. | 4 |
| Rated insulation voltage Ui IEC/EN | | V | 690 |
| Rated impulse withstand voltage Uimp | | kV | 6 |
| Operational frequency | | | |
| | min | Hz | 25 |
| | max | Hz | 400 |
| IEC Conventional free air thermal current Ith | | A | 10 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 0 |
| Protection fuse | | | |
| | gG (IEC) | A | 16 |
| Tightening torque for terminals | | | |
| | min | Nm | 0.8 |
| | max | Nm | 1 |
| | min | lbin | 9 |
| | max | lbin | 9 |
| Tightening torque for coil terminal | | | |
| | min | Nm | 0.8 |
| | max | Nm | 1 |
| | min | lbin | 9 |
| | max | lbin | 9 |
| Max number of wires simultaneously connectable | | Nr. | 2 |
| Conductor section | | | |
| AWG/Kcmil | | | |
| | max | | 12 |
| Flexible w/o lug conductor section | | | |
| | min | mm² | 0.75 |
| | max | mm² | 2.5 |
| Flexible c/w lug conductor section | | | |
| | min | mm² | 1.5 |
| | max | mm² | 2.5 |
| Flexible with insulated spade lug conductor section | | | |
| | min | mm² | 1.5 |
| | max | mm² | 2.5 |
| Power terminal protection according to IEC/EN 60529 | | | IP20 when properly wired |
| **Mechanical features** | | | |
| Operating position | | | |
| | normal | | Vertical plan |
| | allowable | | ±30° |
| Fixing | | | Screw / DIN rail 35mm |
| Weight | | g | 180 |

| | | | | |
|---|---|---|---|---|
| Conductor section | | | | |
| | AWG/kcmil conductor section | | | |
| | | max | | 12 |
| **Auxiliary contact characteristics** | | | | |
| Thermal current Ith | | | A | 10 |
| IEC/EN 60947-5-1 designation | | | | A600 - Q600 |
| Operating current AC15 | | | | |
| | | 230V | A | 3 |
| | | 400V | A | 1.9 |
| | | 500V | A | 1.4 |
| Operating current DC12 | | | | |
| | | 110V | A | 2.9 |
| Operating current DC13 | | | | |
| | | 24V | A | 2.9 |
| | | 48V | A | 1.4 |
| | | 60V | A | 1.1 |
| | | 125V | A | 0.3 |
| | | 220V | A | 0.1 |
| | | 600V | A | 0.6 |
| **Operations** | | | | |
| Mechanical life | | | cycles | 20000000 |
| **Safety related data** | | | | |
| Performance level B10d according to EN/ISO 13489-1 | | | | |
| | | mechanical load | cycles | 20000000 |
| Mirror contats according to IEC/EN 609474-4-1 | | | | YES |
| EMC compatibility | | | | yes |
| **AC coil operating** | | | | |
| Rated AC voltage at 50/60Hz | | | V | 110 |
| AC operating voltage | | | | |
| | of 50/60Hz coil powered at 50Hz | | | |
| | | pick-up | | |
| | | | min | %Us 75 |
| | | | max | %Us 115 |
| | | drop-out | | |
| | | | min | %Us 20 |
| | | | max | %Us 55 |
| | of 50/60Hz coil powered at 60Hz | | | |
| | | pick-up | | |
| | | | min | %Us 80 |
| | | | max | %Us 115 |
| | | drop-out | | |
| | | | min | %Us 20 |
| | | | max | %Us 55 |
| AC average coil consumption at 20°C | | | | |
| | of 50/60Hz coil powered at 50Hz | | | |
| | | | in-rush | VA 30 |
| | | | holding | VA 4 |
| | of 50/60Hz coil powered at 60Hz | | | |
| | | | in-rush | VA 25 |
| | | | holding | VA 3 |
| | of 60Hz coil powered at 60Hz | | | |
| | | | in-rush | VA 30 |
| | | | holding | VA 4 |

| | | | | | |
|---|---|---|---|---|---|
| Dissipation at holding ≤20°C 50Hz | | | | W | 0.95 |
| **Max cycles frequency** | | | | | |
| Mechanical operation | | | | cycles/h | 3600 |
| **Operating times** | | | | | |
| Average time for Us control | | | | | |
| | in AC | | | | |
| | | Closing NO | | | |
| | | | min | ms | 12 |
| | | | max | ms | 21 |
| | | Opening NO | | | |
| | | | min | ms | 9 |
| | | | max | ms | 18 |
| | | Closing NC | | | |
| | | | min | ms | 17 |
| | | | max | ms | 26 |
| | | Opening NC | | | |
| | | | min | ms | 7 |
| | | | max | ms | 17 |
| | in DC | | | | |
| | | Closing NO | | | |
| | | | min | ms | 18 |
| | | | max | ms | 25 |
| | | Opening NO | | | |
| | | | min | ms | 2 |
| | | | max | ms | 3 |
| | | Closing NC | | | |
| | | | min | ms | 3 |
| | | | max | ms | 5 |
| | | Opening NC | | | |
| | | | min | ms | 11 |
| | | | max | ms | 17 |
| **UL technical data** | | | | | |
| Contact rating of auxiliary contacts according to UL | | | | | A600 - Q600 |
| **Ambient conditions** | | | | | |
| Temperature | | | | | |
| | Operating temperature | | | | |
| | | | min | °C | -50 |
| | | | max | °C | +70 |
| | Storage temperature | | | | |
| | | | min | °C | -60 |
| | | | max | °C | +80 |
| Max altitude | | | | m | 3000 |
| **Resistance & Protection** | | | | | |
| Pollution degree | | | | | 3 |
| **Dimensions** | | | | | |




## Wiring diagrams




## Certifications and compliance

Compliance

| |
|---|
| CSA C22.2 n° 60947-1 |
| CSA C22.2 n° 60947-5-1 |
| IEC/EN 60947-1 |
| IEC/EN 60947-5-1 |
| UL 60947-1 |
| UL 60947-5-1 |

Certificates

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|---|
| CCC |
| cULus |
| EAC |

## ETIM classification

ETIM 8.0

EC000196 - Contactor relay